

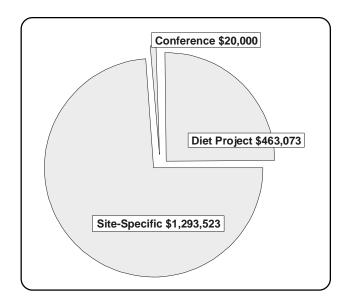


# **Activities in Alaska**

### **ATSDR** in Partnership with Alaska

The Agency for Toxic Substances and Disease Registry (ATSDR) is the lead public health agency responsible for implementing the health-related provisions of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA). ATSDR is an Atlanta-based federal agency with more than 400 employees. ATSDR's annual budget for 2002 is \$78 million. ATSDR is responsible for assessing the presence and nature of health hazards at specific Superfund sites, helping to prevent or reduce further exposure and illnesses that result, and expanding the knowledge base about the health effects of exposure to hazardous substances.

ATSDR works closely with state agencies to carry out its mission of preventing exposure to contaminants at hazardous waste sites and preventing adverse health effects. ATSDR provides funding and technical assistance for states to identify and evaluate environmental health threats to



communities. These resources enable state and local health departments to further investigate environmental health concerns and educate communities. This is accomplished through cooperative agreements and grants. At this time, ATSDR has cooperative agreements and grants with 31 states, 1 American Indian nation (Gila River Indian Community), and 1 commonwealth (Puerto Rico Department of Health). From 1993 through 2001, ATSDR has awarded more than \$1,776,596 in direct funds to the state of Alaska. In addition to direct funding, ATSDR staff provide technical and administrative guidance for state-conducted site activities.

# **ATSDR Site-Specific Activities**

#### **Public Health Assessment-Related Activities**

One of the agency's important mandates is to conduct **public health assessments** of all National Priorities List (NPL) sites and of other sites where there might be a significant threat to the public health. There are **eight** sites on the NPL and 105 sites on the CERCLIS list, in **Alaska**.

A **public health assessment** is a written, comprehensive evaluation of available data and information on the release of hazardous substances into the environment in a specific geographic area. It assesses the current or future impact of any such releases on public health. ATSDR staff members, in conjunction with public health and environmental officials from **Alaska**, have conducted **nine** public health assessments in the state.

A health consultation is a written or oral response from ATSDR to a specific request for information about health risks related to a specific site, chemical release, or hazardous material. It is a more limited response than a public health assessment. To date, 46 documented health consultations have been performed at 31 sites in Alaska. Following is an example of a health consultation conducted in the state.

Aniak Middle School, Aniak: In December 1997, the Environmental Protection Agency (EPA) asked ATSDR to evaluate wipe samples from a school wood shop in this remote Alaskan village to determine if PCBs were present at levels which posed a health risk. ATSDR staff determined within 24 hours that unacceptable levels of PCBs were present in areas in which extended human (particularly children) exposure could occur. ATSDR staff recommended that EPA prevent long-term exposure by restricting further use of the wood shop and conducting additional school sampling to determine the extent of contamination. Based on these recommendations and on the desires of school administrators to have the site usable as soon as possible, EPA performed a time-critical PCB removal at the school during its holiday break. Cleanup of the school interior was finished in January 1998, allowing it to reopen shortly after the holiday break. In 1998, ATSDR released a final health consultation on the site which evaluated PCB contamination remaining in soils outside the school. The health consultation indicated that elevated concentrations of PCBs still existed in soils outside the school building and recommended implementing permanent soil remediation measures and follow up sampling inside the school building. Plans have been made for implementing recommended follow up action.

Of the eight NPL sites in **Alaska**, five are Department of Defense (DOD) sites: Adak Naval Air Station, Eielson Air Force Base, Elmendorf Air Force Base, Fort Richardson, and Fort Wainwright. ATSDR completed the Fort Richardson public health assessment (PHA) in 1996. Currently, ATSDR is working on PHAs for Adak Naval Air Station and Fort Wainwright. In 2003, we anticipate beginning our evaluation of Eielson Air Force Base.

## **Educating Health Professionals and Community Activities**

#### **American Indian and Alaska Native Initiative**

Through its Office of Tribal Affairs, ATSDR is coordinating and consulting with Alaska Native villages on hazard-ous exposures health concerns.

ATSDR staff are partnering with various Alaska Native villages and corporations, federal agencies, and state agencies concerning possible environmental exposures from former military sites and the correlation to cancer rates in several areas. ATSDR staff are also collaborating on subsistence lifestyle issues and potential hazardous levels of chemical contamination to Alaska Natives. The following sites/tribes/villages have ongoing activities: Adak Naval Air facility; Northeast Cape; Port Graham; Dutch Harbor; Umiat; Gambell; Cook Inlet; Aleutian Pribilof Islands; St. Lawrence Island; Sitka; Ketchikan; Ft. Yukon; and Annette Island.

# **Public Health Conference Support**

To encourage information sharing, technical discussion, and other training activities related to acute illness and chronic disease in persons exposed to hazardous substances, ATSDR awards grants to state and local agencies to support public health conferences. One such conference has been funded in **Alaska** since 1995:

Evaluating the Risks and Benefits of Subsistence Foods in Alaska - In 1995, the Alaska Department of Health and Social Services held a public health conference with support from ATSDR on "Evaluating the Risks and Benefits of Subsistence Foods in Alaska." The objectives of the conference were to facilitate communication among scientists and between public health professionals and Alaska Natives regarding the risks and benefits of subsistence foods. These risks include the well-documented presence of heavy metals and anthropogenic pollutants in the food chain of the Arctic, and the tendency of the substances to bio-accumulate and biomagnify in this food chain.

# The Alaska Traditional Diet Project

#### **Alaska Residents' Concerns**

Persistent organic pollutants, heavy metals, and radionuclides from both local and distant sources have been found in **Alaska** and other Arctic areas. Concerns exist that exposures to contaminants resulting from a subsistence lifestyle, or

through commercial and recreational exposures, can potentially lead to cancer, worsen existing conditions such as diabetes and asthma, and increase the incidence of other health problems. To enable them to make informed choices about their foods, Alaskans have requested more information about the risk from these exposures and the nutritional benefits of traditional foods.

#### **Congressional Mandate**

In 2001, Congress asked ATSDR to identify and study "contaminants in the environment, subsistence resources, and people in Alaska Native populations." Subsequently, Congress expanded ATSDR's project to cover all consumers of Alaska traditional foods, including subsistence, commercial, and recreational consumers. Among its strengths, ATSDR brings an extensive public health experience in helping state and tribal governments and communities identify and reduce exposures to contaminants in the environment.

#### **ATSDR's Response to Mandate**

ATSDR formed an **Alaska Traditional Diet Project (ATDP)** team to address the mandate from Congress. In consultation and collaboration with the Alaska Department of Health and Social Services, other state and federal agencies, Alaska native organizations, and tribes, ATSDR provided funding to the Alaska Native Health Board (ANHB). The monies supported: (1) a contaminants workshop in **Alaska**, (2) development and implementation of a food frequency questionnaire (FFQ), and (3) limited biota (food) sampling for environmental contaminant testing.

The 1-year grant to ANHB, begun in September 2001, includes training and monies to Alaska Native villages to conduct the FFQ and analyze the data collected. Briefly, the food frequency questionnaire will provide information on what is eaten seasonally and portions consumed. Data analysis by nutrition experts will provide information on the nutrients present in these foods.

The project is being closely coordinated with Alaska Natives and, through tribal input, will build capacity within the native villages for future projects. Thirteen villages are funded to collect FFQ data; these thirteen villages are located in four broad, regional areas of **Alaska** - the interior, the southeast, the west coast, and the Arctic slope.

### **Toxicological Profiles**

ATSDR develops toxicological profiles that describe health effects, environmental characteristics, and other information for substances found at NPL sites. These profiles describe pathways of human exposure and the behavior of toxic substances in environmental media such as air, soil, and water. In the past 4 years, more than 433 of these profiles have been supplied directly by ATSDR to requesters, including representatives of federal, state, and local health and environmental departments; academic institutions; private industries; and nonprofit organizations in Alaska.

A substance for which ATSDR developed a toxicological profile in **Alaska** was methyl tertiary butyl ether (MTBE). In 1992, residents of Fairbanks reported health problems after MTBE was added to gasoline during an oxygenated fuel program. The **Centers for Disease Control and Prevention (CDC)** conducted an exposure survey to investigate the effect of the program on human exposure to MTBE. The information provided in ATSDR's toxicological profile assists in addressing concerns related to MTBE.

